

**FRAME SAW FOR CUTTING GRANITE AND METHOD TO IMPROVE
PERFORMANCE OF FRAME SAW FOR CUTTING GRANITE**

ABSTRACT OF THE DISCLOSURE

A horizontal frame saw is equipped with a plurality of generally parallel, spaced-apart blades for cutting granite. Each of the blades has a cutting edge with diamond cutting segments mounted thereon for engaging the granite with a swinging motion for cutting of the granite, wherein the segments have optimized / controlled segment variables for uniform wearing of the segments along each blade during cutting of granite. Segment variables include one or more of: spacing of segments along the length of the blade; diamond concentration in each segment; diamond grade (as measured by compressive fracture strength) in each segment; segment composition (bond, secondary abrasives); or segment dimensions.